09/288,556

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FILE 'HOME' ENTERED AT 17:33:08 ON 30 JUL 2003

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 17:33:19 ON 30 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 JUL 2003 HIGHEST RN 557055-78-4 DICTIONARY FILE UPDATES: 29 JUL 2003 HIGHEST RN 557055-78-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
Uploading 001777.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

т.1

STR

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 17:33:54 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3 TO ITERATE

09/288,556

100.0% PROCESSED

3 ITERATIONS

3 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

3 TO .

PROJECTED ANSWERS:

3 TO 163

3 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 17:33:59 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 69 TO ITERATE

100.0% PROCESSED

69 ITERATIONS

28 ANSWERS

SEARCH TIME: 00.00.01

L3

28 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

148.36 148.15

FILE 'CAPLUS' ENTERED AT 17:34:12 ON 30 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 30 Jul 2003 VOL 139 ISS 5 FILE LAST UPDATED: 29 Jul 2003 (20030729/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13 and mixed crystal

13 L3

695130 MIXED

6 MIXEDS

695134 MIXED

(MIXED OR MIXEDS)

1040033 CRYSTAL

573377 CRYSTALS

1300337 CRYSTAL

(CRYSTAL OR CRYSTALS)

10797 MIXED CRYSTAL

(MIXED (W) CRYSTAL)

1.4

1 L3 AND MIXED CRYSTAL

INVENTOR(S):

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN

2002:313015 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 136:342137

Mixed crystals of benzimidazolone TITLE:

dioxazine pigments, their production and their use Schmidt, Martin U.; Kempter, Peter; Plueg, Carsten;

Born, Roland

Clariant Gmbh, Germany PATENT ASSIGNEE(S):

Ger. Offen., 12 pp. SOURCE:

CODEN: GWXXBX Patent

DOCUMENT TYPE:

German LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10052858	A1	20020425	DE 2000-10052858	20001024
EP 1201718	A2	20020502	EP 2001-124502	20011012
EP 1201718	A3	20030212		
R: AT, BE,	CH, DE	, DK, ES, FR	, GB, GR, IT, LI, LU	, NL, SE, MC, PT,
IE, SI,	LT, LV	, FI, RO, MK	CY, AL, TR	
JP 2002179936	A2	20020626	JP 2001-324512	20011023
US 2002091258	A1	20020711	US 2001-1777	20011024
PRIORITY APPLN. INFO	.:		DE 2000-10052858 A	20001024
OTHER SOURCE(S):	CA	SREACT 136:3	42137; MARPAT 136:34	2137
GI				

Mixed crystals from two or more different benzimidazolone dioxazine pigments (I; X1, X2 = H, halogen; R1, R2, R3, R4 = H, C1118-alkyl, trifluoromethyl, C1-18-alkylcarbonyl, C5-6-cycloalkyl, optionally substituted Ph) are obtained which are sparingly sol. and are characterized by good fastness and red to blue coloration. mixed crystals are suitable for pigmenting lacquers, plastics, printing inks, aq. or solvent-contg. pigment pastes, electrophotog. toners and developers, powder varnishes, ink, ink jet ink, color filters and for dyeing seeds and cosmetics.

223744-94-3 415933-88-9 415933-89-0

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES

Ι

(pigment; crystn. of mixed crystals of benzimidazolone dioxazine pigments)

RN223744-94-3 CAPLUS

CN Diimidazo[4,5-b:4',5'-m]triphenodioxazine-2,10-dione, 6,14-dichloro-1,3,9,11-tetrahydro-1,9-bis(4-methylphenyl)- (9CI) (CA INDEX NAME)

RN 415933-88-9 CAPLUS

CN Diimidazo[4,5-b:4',5'-m]triphenodioxazine-2,10-dione, 6,14-dichloro-1,3,9,11-tetrahydro-1,9-diphenyl- (9CI) (CA INDEX NAME)

RN 415933-89-0 CAPLUS

CN Diimidazo[4,5-b:4',5'-m]triphenodioxazine-2,10-dione, 6,14-dichloro-1,9-bis(4-chlorophenyl)-1,3,9,11-tetrahydro- (9CI) (CA INDEX NAME)

IT 167163-69-1P 223745-08-2P 244303-78-4P

415725-15-4P 415933-87-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (pigment; prodn. of mixed crystals of benzimidazolone dioxazine pigments)

RN 167163-69-1 CAPLUS

CN Diimidazo[4,5-b:4',5'-m]triphenodioxazine-2,16-dione, 6,14-dichloro-1,3,9,11-tetrahydro-(9CI) (CA INDEX NAME)

RN 223745-08-2 CAPLUS

CN Diimidazo[4,5-b:4',5'-m]triphenodioxazine-2,10-dione, 6,14-dichloro-1-ethyl-1,3,9,11-tetrahydro-9-methyl- (9CI) (CA INDEX NAME)

RN 244303-78-4 CAPLUS

CN Diimidazo[4,5-b:4',5'-m]triphenodioxazine-2,10-dione, 6,14-dichloro-1,9-diethyl-1,3,9,11-tetrahydro- (9CI) (CA INDEX NAME)

RN 415725-15-4 CAPLUS

CN Diimidazo[4,5-b:4',5'-m]triphenodioxazine-2,10-dione, 6,14-dichloro-1,3,9,11-tetrahydro-1,9-dimethyl- (9CI) (CA INDEX NAME)

RN 415933-87-8 CAPLUS

CN Diimidazo[4,5-b:4',5'-m]triphenodioxazine-2,10-dione, 6,14-dichloro-1-ethyl-1,3,9,11-tetrahydro-(9CI) (CA INDEX NAME)

09/288,556

IT 415933-83-4 415933-84-5

RL: TEM (Technical or engineered material use); USES (Uses) (prodn. of mixed crystals of benzimidazolone dioxazine pigments)

RN 415933-83-4 CAPLUS

CN Diimidazo[4,5-b:4',5'-m]triphenodioxazine-2,10-dione, 6,14-dichloro-1,9-diethyl-1,3,9,11-tetrahydro-, mixt. with 6,14-dichloro-1,9-dimethyl-1,3,9,11-tetrahydrodiimidazo[4,5-b:4',5'-m]triphenodioxazine-2,10-dione (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 415725-15-4 CMF C22 H12 Cl2 N6 O4

$$\begin{array}{c|c} Me & C1 \\ \hline \\ N & N \\ \hline \\ C1 & Me \\ \end{array}$$

CM 2

CRN 244303-78-4 CMF C24 H16 Cl2 N6 O4

RN 415933-84-5 CAPLUS

CN Diimidazo[4,5-b:4',5'-m] triphenodioxazine-2,10-dione, 6,14-dichloro-1,9-diethyl-1,3,9,11-tetrahydro-, mixt. with 6,14-dichloro-1-ethyl-1,3,9,11-tetrahydro-9-methyldiimidazo[4,5-b:4',5'-m] triphenodioxazine-2,10-dione and 6,14-dichloro-1,3,9,11-tetrahydro-1,9-dimethyldiimidazo[4,5-b:4',5'-m] triphenodioxazine-2,10-dione (9CI) (CA INDEX NAME)

CM 1

CRN 415725-15-4 CMF C22 H12 Cl2 N6 O4 .

$$\begin{array}{c|c} Me & C1 \\ \hline \\ N & N \\ \hline \\ C1 & Me \\ \end{array}$$

CM 2

CRN 244303-78-4 . CMF C24 H16 Cl2 N6 O4

CM 3

CRN 223745-08-2 CMF C23 H14 Cl2 N6 O4

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$